

Statement by Ministers of the Pentilateral Energy Forum

on a joint vision for a decarbonized electricity system

We, the ministers of the Pentilateral Energy Forum¹, aim to drive the development of a sustainable energy future for the Penta region. We fully commit to a fair contribution to achieve the objectives of the Paris Agreement and to reaching climate neutrality by 2050 at the latest. The path to this goal will benefit from coordinated efforts within the Pentilateral Energy Forum where we bridge our national plans and global aspirations through regional cooperation, notably through our joint NECP² chapter.

As a part of this regional cooperation, the Pentilateral Energy Forum has performed multiple studies to investigate possible futures of our energy system. Based on these studies, as well as from the IEA net zero roadmap, we conclude that timely decarbonization of the electricity system is a prerequisite to allow for full decarbonization of our societies by 2050, and that collective action in our region allows to address this challenge in a more efficient and effective manner.

We therefore express our collective aim to strive for the decarbonization of our interconnected electricity system by the year 2035, and to continue on an ambitious path to full decarbonization of our societies by 2050.

To transition to a decarbonized electricity system in the Penta region, we agree on the following guiding principles:

Energy Efficiency First and Energy Savings: Where possible the "energy efficiency first" principle and the promotion of energy savings are essential in mitigating the expected increase in power demand. In many situations, direct electrification is a no-regret option that offers immediate benefits to our communities, enhancing both the sustainability and efficiency of energy usage.

Renewable Energy: We acknowledge that renewables, particularly solar and wind energy, are a crucial element of our collective efforts towards net-zero energy systems. We recognize the need for accelerated deployment of these sustainable energy sources to meet our decarbonization objectives, whilst fully respecting the sovereignty of each Penta country to decide on its own energy mix.

Coordinated Energy System Planning: We emphasize the need for a coordinated approach to energy system planning in the Penta region. This will be instrumental in achieving a timely and cost-efficient system transformation while minimizing the risk of stranded assets. Reaping benefits from a coordinated planning of offshore and onshore grids for hydrogen and electricity infrastructures which also includes imports is of crucial importance.

Flexibility as a Prerequisite: We recognize that in moving towards decarbonization the need for flexibility, including demand side flexibility, is crucial for power system stability as well as for security of supply. Flexibility will thus have to increase significantly across all time scales. We agree to work jointly to ensure sufficient flexibility in the electricity system across the region, amongst others through ensuring new power demand is flexible, and by leveraging business opportunities both on the supply and demand side. Furthermore, we will aim to cooperate in exploiting our various storage potentials.

Role of (Renewable) Molecules: We acknowledge the pivotal role that molecules such as hydrogen will continue to play in hard-to-abate sectors, as well as their fundamental role in stabilizing a decarbonized electricity system. We are committed to establishing and advancing the availability of hydrogen for advancing towards a net-zero economy.

Infrastructure Development: We anticipate significant evolution in our grid infrastructure, characterized by substantial increases in power grid capacities, grid reinforcement at all levels—distribution, transmission, and cross-border- and a more efficient use of existing power networks. Grid stability is becoming increasingly important. It is therefore essential to develop a roadmap to achieve safe and robust system operation with decarbonized electricity.

Future-Proof Market Design: We recognize the necessity of a future-proof market design. This design should incentivize necessary investments in renewable generation, flexibility, storage and transmission infrastructure and allow for efficient dispatch, and ensure resource and transmission adequacy for a sustainable and resilient energy future.

18 December 2023, Brussels

¹ The Pentilateral Energy Forum is the framework for regional energy cooperation between Austria, Belgium, France, Germany, Luxembourg, the Netherlands and Switzerland.

² National Energy and Climate Plans (NECPs) as introduced by the Regulation on the Governance of the Energy Union and Climate Action (EU)2018/1999.